Claim listing:

1. (currently amended) A seismic cable, comprising:

a tension support cable capable of absorbing tension during deployment of the seismic cable;

a signal cable attached to the support cable at a plurality of first points spaced along the length of the signal cable; and

at least one sensor module disposed on the signal cable.

2. (original) The seismic cable of claim 1, further comprising a first sheath enclosing the support cable and the signal cable.

3. (original) The seismic cable of claim 2, wherein the first sheath comprises at least one of a skin, a jacket or an extrusion matrix.

4. (original) The seismic cable of claim 1, wherein the support cable includes a plurality of strengthening members.

5. (original) The seismic cable of claim 4, wherein the strengthening members are cabled by a second sheath.

6. (original) The seismic cable of claim 1, wherein the support cable includes at least one of a signal lead and a power lead.

7. (original) The seismic cable of claim 6, further comprising an electronics module powered over the power lead and capable of transmitting data over the signal lead.

8. (original) The seismic cable of claim 7, wherein the support cable is sectioned.

9. (original) The seismic cable of claim 1, wherein the signal cable includes a plurality of leads cabled by a third sheath.

10. (original) The seismic cable of claim 1, wherein the signal cable includes at least one strengthening member.

11. -12. (currently canceled)

13. (original) The seismic cable of claim 1, further comprising:

a plurality of sensor modules electrically connected to and distributed along the signal cable; and

a plurality of electronics modules by which the signal cable is attached to the support cable at the plurality of first points.

14. (original) The seismic cable of claim 1, wherein the electronics modules are electrically connected to the signal cable at the plurality of first points and mechanically connected to the support cable.

15. (original) The seismic cable of claim 1, wherein the signal cable is attached to the support cable by a zipper mechanism.

16. (original) The seismic cable of claim 1, wherein the plurality of first points are spaced along the length of the signal cable in proportion to a length of the sensor module.

17. (original) The seismic cable of claim 16, wherein each of the plurality of first points is positioned between an adjacent pair of sensor modules

18. (original) The seismic cable of claim 16, wherein at least separation can be created by pulling a rip cord fabricated in the seismic cable to detach the signal cable from the support cable.

19. (original) The seismic cable of claim 1, further comprising a plurality of arms mechanically affixed to the support cable and rotationally connected to the signal cable to attach the signal cable to the support cable at the plurality of first points.

20. (currently amended) The seismic cable of claim 19, wherein the arms are either rigid arms or semi-rigid arms; mechanically fixed by a plurality of clamps; or rotationally connected by a bearing.

21. – 23. (currently canceled)

24. (original) The seismic cable of claim 1, further comprising a plurality of sensor modules electrically connected to and distributed along the signal cable and by which the support cable and the signal cable are joined, wherein the support cable passes through a groove in the sensor modules.

25. -28. (currently canceled)

29. (currently amended) A method of assembling a seismic cable, comprising attaching a tension support cable capable of absorbing tension during deployment of the seismic cable to a signal cable at a plurality of first points spaced along the length thereof, the signal cable having at least one sensor module disposed thereon.

30. (original) The method of claim 29, wherein attaching the support cable to the signal cable includes mechanically connecting an electronics module to the support cable and electrically connecting the electronics module to the signal cable.

31. (original) The method of claim 29, wherein attaching the support cable to the signal cable includes zipping the signal cable to the support cable at the points.

32. (original) The method of claim 29, wherein attaching the support cable to the signal cable includes separating the support cable and the signal cable between the plurality of first points.

33. (original) The method of claim 29, wherein separating the support cable and the signal cable includes pulling a rip-cord.

34. (original) The method of claim 29, wherein attaching the support cable to the sensor includes mechanically affixing either a rigid arm or a semi-rigid arm to the support cable and rotationally connecting the respective rigid or semi-rigid arm to the signal cable at each of the plurality of first points.

35. (currently canceled)